

**SECURITIES
LENDING**



KES

FINANCE MODEL

DEFINITION OF TERMS

- **LENDING FEE** - QUOTED PRICE AT WHICH THE LENDER WANT TO LEND THEIR SECURITIES. THIS IS CALCULATED AS A PERCENTAGE OF THE VALUE OF THE SECURITIES LENT OUT.
- **SLB LENDER COMMISSIONS** – THIS IS THE COMMISSION AMOUNTS CHARGED TO LENDER AND PAYABLE FOR SLB TRANSACTION. THE COMMISSION IS DEDUCTED FROM THE LENDING FEE.
- **SLB BORROWER COMMISSIONS** – THIS IS THE COMMISSION AMOUNTS CHARGED TO THE BORROWER FOR THE SLB TRANSACTION.
- **SLB GUARANTEE FUND LEVY** – THIS IS A LEVY CHARGED BY CDSC TOWARDS BUILDING UP GUARANTEE FUND TO TAKE CARE OF LENDING FEE IN CASE OF A FAILURE BY THE BORROWER IN SETTLING THE LENDER.
- **COLLATERAL MANAGEMENT FEE** – THIS IS A FEE CHARGED BY CDSC TO THE BORROWER IN MANAGING CASH COLLATERAL
- **CALL RATE** – THE RATE EARNED ON THE CASH COLLATERAL MANAGED BY CDSC.

SLB APPLICABLE RATES

<i>Lending Fee Rate (market determined)</i>	<i>2%</i>		<i>Commission</i>	<i>Levy</i>
<i>Lending SLB Commission & Levies</i>	<i>16.00%</i>	<i>of Lending Fees</i>	<i>15.00%</i>	<i>1.00%</i>
<i>Borrowing SLB Commission & Levies</i>	<i>0.55%</i>	<i>of Borrowed Value</i>	<i>0.5%</i>	<i>0.05%</i>
<i>CDA share of SLB Lending Commission</i>	<i>8.00%</i>			
<i>CDSC share of SLB Lending Commission</i>	<i>7.00%</i>			
<i>SLB Guarantee Fund Levy</i>	<i>1.00%</i>			
<i>CDA share of SLB Borrowing Commission</i>	<i>0.30%</i>			
<i>CDSC share of SLB Borrowing Commission</i>	<i>0.20%</i>			
<i>SLB Guarantee Fund Levy</i>	<i>0.05%</i>			
<i>Collateral Cover</i>	<i>110.00%</i>			
<i>Collateral Management Fee</i>	<i>1.00%</i>			
<i>Deposits Call rate</i>	<i>6.50%</i>			

Total Cost of a SLB Transaction with a lending fee of 2%

<i>Market Determined Lending rate</i>	<i>2.00%</i>
<i>Borrowing SLB Commission & Levy</i>	<i>0.55%</i>
	<i>2.55%</i>

LENDING FEE FORMULA

- IN A LENDING TRANSACTION, THE LENDER WILL BE ABLE TO QUOTE THE PRICE AT WHICH THEY WANT TO LEND THEIR SECURITIES.
- LENDING FEE FORMULA;

$$L = \{(S \times P) (R \times D/365)\} - C$$

WHERE:

L = LENDING FEE/RETURN TO LENDER (NET)

S = NUMBER OF SHARES LENT

P = CURRENT PRICE OF THE SHARES LENT (TRADING PRICE AT THE BEGINNING OF THE CONTRACT)

R = LENDING RATE (IN %) P.A

D = NUMBER OF LENDING DAYS/LENDING DURATION/CONTRACT PERIOD

C = SLB COMMISSIONS & LEVIES (16%)

LENDING FEE CALCULATION

- FOR EXAMPLE IF THE LENDER WANTS TO LEND **1 MILLION SAFARICOM SHARES** AND THE SHARES ARE TRADING AT **KES 28** AT THE NSE FOR A PERIOD OF **90 DAYS**, THE LENDER CAN CHARGE A LENDING FEE OF **2% P.A** WHICH WOULD THEN TRANSLATE TO **KES 115,989 OVER THE 90 DAYS PERIOD** AS SHOWN BELOW:

THEREFORE:

$$\square (S \times P) (1,000,000 \times 28) = \mathbf{28,000,000}$$

$$\square (R \times D/365) \text{ LENDING RATE FOR 90 DAYS } (2\% \times 90/365) = \mathbf{0.49315\%}$$

$$\square \{(S \times P) (R \times D/365)\} 28,000,000 \times 0.49315\% = \mathbf{138,082}$$

$$\square C = 16\% \times 138,082 = \mathbf{22,093}$$

$$\square L = 138,082 - 22,093 = \mathbf{115,989}$$

LENDING SIDE ACTUAL SIMULATED SLB TRANSACTION (SELECTED)

NSE 20 Index Securities	Borrowing Date	Return Date	Borrowing Price	Return Price	Price Change	% Price change	Number of Days Borrowed	Av. No of Units for the Scenarios (Normal Trading)	Value at borrowing date	Accrued lending fee	15 % +1 % SLB Commission & Levies (Lender)	Net Earnings (Lender)
ABSA	19/02/2019	19/02/2020	11.45	13.15	-1.70	-15%	365	587,160	6,722,982	134,460	- 21,514	112,946
	19/02/2019	19/08/2019	11.45	10.75	0.70	6%	181	587,160	6,722,982	66,677	- 10,668	56,009
	19/02/2019	21/05/2019	11.45	10.15	1.30	11%	91	587,160	6,722,982	33,523	- 5,364	28,159
	20/01/2020	19/02/2020	13.40	13.15	0.25	2%	30	587,160	7,867,944	12,934	- 2,069	10,864
DTB	19/02/2019	19/02/2020	150.75	113.00	37.75	25%	365	32,300	4,869,225	97,385	- 15,582	81,803
	19/02/2019	19/08/2019	150.75	0.00	0.00		181	0	-	-	-	-
	19/02/2019	21/05/2019	150.75	120.00	30.75	20%	91	32,300	4,869,225	24,279	- 3,885	20,395
	20/01/2020	19/02/2020	118.00	113.00	5.00	4%	30	32,300	3,811,400	6,265	- 1,002	5,263
EQUITY	19/02/2019	19/02/2020	42.20	50.25	-8.05	-19%	365	1,506,240	63,563,328	1,271,267	- 203,403	1,067,864
	19/02/2019	19/08/2019	42.20	38.85	3.35	8%	181	1,506,240	63,563,328	630,409	- 100,865	529,543
	19/02/2019	21/05/2019	42.20	37.35	4.85	11%	91	1,506,240	63,563,328	316,946	- 50,711	266,235
	20/01/2020	19/02/2020	51.75	50.25	1.50	3%	30	1,506,240	77,947,920	128,134	- 20,501	107,632
KCB	19/02/2019	19/02/2020	42.65	50.75	-8.10	-19%	365	1,070,240	45,645,736	912,915	- 146,066	766,848
	19/02/2019	19/08/2019	42.65	39.75	2.90	7%	181	1,070,240	45,645,736	452,706	- 72,433	380,273
	19/02/2019	21/05/2019	42.65	38.60	4.05	9%	91	1,070,240	45,645,736	227,603	- 36,417	191,187
	20/01/2020	19/02/2020	52.00	50.75	1.25	2%	30	1,070,240	55,652,480	91,484	- 14,637	76,846
NCBA	19/02/2019	19/02/2020	40.05	35.85	4.20	10%	365	155,300	6,219,765	124,395	- 19,903	104,492
	19/02/2019	19/08/2019	40.05	0.00	0.00		181		-	-	-	-
	19/02/2019	21/05/2019	40.05	31.15	8.90	22%	91	155,300	6,219,765	31,014	- 4,962	26,051
	20/01/2020	19/02/2020	36.45	35.85	0.60	2%	30	155,300	5,660,685	9,305	- 1,489	7,816
STANCHART	19/02/2019	19/02/2020	200.00	201.75	-1.75	-1%	365	5,100	1,020,000	20,400	- 3,264	17,136
	19/02/2019	19/08/2019	200.00	196.75	3.25	2%	181	5,100	1,020,000	10,116	- 1,619	8,498
	19/02/2019	21/05/2019	200.00	183.75	16.25	8%	91	5,100	1,020,000	5,086	- 814	4,272
	20/01/2020	19/02/2020	207.00	201.75	5.25	3%	30	5,100	1,055,700	1,735	- 278	1,458
COOP	19/02/2019	19/02/2020	15.20	14.90	0.30	2%	365	524,440	7,971,488	159,430	- 25,509	133,921
	19/02/2019	19/08/2019	15.20	11.85	3.35	22%	181	524,440	7,971,488	79,060	- 12,650	66,410
	19/02/2019	21/05/2019	15.20	11.65	3.55	23%	91	524,440	7,971,488	39,748	- 6,360	33,389
	20/01/2020	19/02/2020	15.85	14.90	0.95	6%	30	524,440	8,312,374	13,664	- 2,186	11,478

BORROWER'S COST FORMULA

- THE COST OF SLB TRANSACTION WILL BE BORNE BY THE BORROWER
- SLB COST TO THE BORROWER THEREFORE WILL BE AS FOLLOWS;

**□ LENDING FEE (GROSS) + 0.55% OF BORROWED VALUE + EQUITY
MKT TRADING LEVIES**

WHERE;

LENDING FEE (GROSS) WILL BE = **{(S X P) (R X D/365)}**

EQUITY MARKET TRADING LEVIES = **1.8%**

BORROWING SIDE ILLUSTRATION

IN THE EARLIER EXAMPLE IF THE BORROWER BORROWS 1 MILLION SAFARICOM SHARES WITH SHARES TRADING AT KES 28 AND IMMEDIATELY SELLS IN THE SECONDARY MARKET AT SAME PRICE . CONTRACT PERIOD OF 90 DAYS AND THE LENDING FEE OF 2% P.A ,THEN THE BORROWER TRANSACTION ECONOMICS WILL LOOK AS FOLLOWS:

❑ BORROWING COST WILL BE $\{(1,000,000 \times 28) \times (2\% \times 90/365)\} + \{(0.55\% \times 90/365) \times 28,000,000\}$

❑ $138,082 + 37,973 = 176,055$

THIS THEREFORE MEANS TOTAL BORROWER'S COST WILL BE $(176,055 + \text{TRADING TRANSACTION LEVIES})$

IF THE SHARE PRICE FALLS BY KES 2 TO KES 26 WITHIN THE CONTRACT PERIOD THE FOLLOWING ECONOMICS WILL APPLY TO THE BORROWER;

❑ COST OF BUYING BACK THE SHARES TO RETURN TO THE LENDER $1,000,000 \times 26 = 26,000,000$

❑ TRANSACTION GROSS PROFIT WILL THEREFORE BE $28,000,000 - 26,000,000 = 2,000,000$

❑ NET PROFIT = $2,000,000 - [176,055 + \{\text{TRANSACTION LEVIES AT NSE } (28,000,000 \times 1.8\% + 26,000,000 \times 1.8\%) \}]$

❑ THEREFORE NET PROFIT WILL BE $2,000,000 - [176,055 + \{504,000 + 468,000\}]$

❑ NET PROFIT = KES 851,945 EXCLUDING INTEREST EARNED FROM CASH COLLATERAL

BORROWING SIDE ACTUAL SIMULATED SLB TRANSACTION (SELECTED)

NSE 20 Index Securities	Borrowing Date	Return Date	Borrowing Price	Return Price	Price Change	% Price change	Number of Days Borrowed	Av. No of Units for the Scenarios (Normal Trading)	Value at borrowing date	Value on return date	Value Difference	Accrued lending fee	0.50% + 0.05% SLB Commission & Levies (Borrower)	Transaction Levies at sale of shares (Borrower)	Transaction Levies at purchase of shares to return (Borrower)	SLB Cost to the (Borrower)	Interest Earnings from Cash Collateral (Borrower)	Net Earnings (Borrower)
ABSA	19/02/2019	19/02/2020	11.45	13.15	-1.70	-15%	365	587,160	6,722,982	7,721,154	- 998,172	134,460	36,976	121,014	138,981	431,430	341,359	- 1,088,243
	19/02/2019	19/08/2019	11.45	10.75	0.70	6%	181	587,160	6,722,982	6,311,970	411,012	66,677	18,336	121,014	113,615	319,643	169,277	260,646
	19/02/2019	21/05/2019	11.45	10.15	1.30	11%	91	587,160	6,722,982	5,959,674	763,308	33,523	9,219	121,014	107,274	271,029	85,106	577,385
	20/01/2020	19/02/2020	13.40	13.15	0.25	2%	30	587,160	7,867,944	7,721,154	146,790	12,934	3,557	141,623	138,981	297,094	32,835	- 117,469
DTB	19/02/2019	19/02/2020	150.75	113.00	37.75	25%	365	32,300	4,869,225	3,649,900	1,219,325	97,385	26,781	87,646	65,698	277,509	247,235	1,189,050
	19/02/2019	19/08/2019	150.75	0.00	0.00		181	0	-	-	-	-	-	-	-	-	-	-
	19/02/2019	21/05/2019	150.75	120.00	30.75	20%	91	32,300	4,869,225	3,876,000	993,225	24,279	6,677	87,646	69,768	188,370	61,639	866,494
	20/01/2020	19/02/2020	118.00	113.00	5.00	4%	30	32,300	3,811,400	3,649,900	161,500	6,265	1,723	68,605	65,698	142,292	15,906	35,114
EQUITY	19/02/2019	19/02/2020	42.20	50.25	-8.05	-19%	365	1,506,240	63,563,328	75,688,560	- 12,125,232	1,271,267	349,598	1,144,140	1,362,394	4,127,399	3,227,428	- 13,025,203
	19/02/2019	19/08/2019	42.20	38.85	3.35	8%	181	1,506,240	63,563,328	58,517,424	5,045,904	630,409	173,362	1,144,140	1,053,314	3,001,225	1,600,451	3,645,130
	19/02/2019	21/05/2019	42.20	37.35	4.85	11%	91	1,506,240	63,563,328	56,258,064	7,305,264	316,946	87,160	1,144,140	1,012,645	2,560,891	804,646	5,549,019
	20/01/2020	19/02/2020	51.75	50.25	1.50	3%	30	1,506,240	77,947,920	75,688,560	2,259,360	128,134	35,237	1,403,063	1,362,394	2,928,827	325,299	- 344,168
KCB	19/02/2019	19/02/2020	42.65	50.75	-8.10	-19%	365	1,070,240	45,645,736	54,314,680	- 8,668,944	912,915	251,052	821,623	977,664	2,963,254	2,317,662	- 9,314,536
	19/02/2019	19/08/2019	42.65	39.75	2.90	7%	181	1,070,240	45,645,736	42,542,040	3,103,696	452,706	124,494	821,623	765,757	2,164,580	1,149,306	2,088,423
	19/02/2019	21/05/2019	42.65	38.60	4.05	9%	91	1,070,240	45,645,736	41,311,264	4,334,472	227,603	62,591	821,623	743,603	1,855,420	577,828	3,056,880
	20/01/2020	19/02/2020	52.00	50.75	1.25	2%	30	1,070,240	55,652,480	54,314,680	1,337,800	91,484	25,158	1,001,745	977,664	2,096,050	232,254	- 525,997
NCBA	19/02/2019	19/02/2020	40.05	35.85	4.20	10%	365	155,300	6,219,765	5,567,505	652,260	124,395	34,209	111,956	100,215	370,775	315,809	597,294
	19/02/2019	19/08/2019	40.05	0.00	0.00		181		-	-	-	-	-	-	-	-	-	-
	19/02/2019	21/05/2019	40.05	31.15	8.90	22%	91	155,300	6,219,765	4,837,595	1,382,170	31,014	8,529	111,956	87,077	238,575	78,736	1,222,331
	20/01/2020	19/02/2020	36.45	35.85	0.60	2%	30	155,300	5,660,685	5,567,505	93,180	9,305	2,559	101,892	100,215	213,972	23,624	- 97,168
STANCHART	19/02/2019	19/02/2020	200.00	201.75	-1.75	-1%	365	5,100	1,020,000	1,028,925	- 8,925	20,400	5,610	18,360	18,521	62,891	51,791	- 20,025
	19/02/2019	19/08/2019	200.00	196.75	3.25	2%	181	5,100	1,020,000	1,003,425	16,575	10,116	2,782	18,360	18,062	49,320	25,682	- 7,062
	19/02/2019	21/05/2019	200.00	183.75	16.25	8%	91	5,100	1,020,000	937,125	82,875	5,086	1,399	18,360	16,868	41,713	12,912	54,074
	20/01/2020	19/02/2020	207.00	201.75	5.25	3%	30	5,100	1,055,700	1,028,925	26,775	1,735	477	19,003	18,521	39,736	4,406	- 8,555
COOP	19/02/2019	19/02/2020	15.20	14.90	0.30	2%	365	524,440	7,971,488	7,814,156	157,332	159,430	43,843	143,487	140,655	487,415	404,752	74,670
	19/02/2019	19/08/2019	15.20	11.85	3.35	22%	181	524,440	7,971,488	6,214,614	1,756,874	79,060	21,741	143,487	111,863	356,151	200,713	1,601,436
	19/02/2019	21/05/2019	15.20	11.65	3.55	23%	91	524,440	7,971,488	6,109,726	1,861,762	39,748	10,931	143,487	109,975	304,141	100,911	1,658,532
	20/01/2020	19/02/2020	15.85	14.90	0.95	6%	30	524,440	8,312,374	7,814,156	498,218	13,664	3,758	149,623	140,655	307,699	34,690	225,209

SLB & SECONDARY EQUITY MARKET COST STRUCTURE

- 20 NSE SHARE INDEX COMPANIES TRANSACTION COSTS SIMULATED FOR 365,181,90 & 30 DAYS IN THE PERIOD STARTING FEB 2019 TO FEB 2020

								Market Trading
Trading Fees	CDSC	CDA	CMA	Investor C. Fund	GF	NSE	Trading Costs	Costs Proportions
Buy - Trading Transactional fee	1,721,861	31,423,970	2,582,792	215,233	215,233	2,582,792	38,741,880	
Sale - Trading Transactional fee	1,700,568	31,035,371	2,550,852	212,571	212,571	2,550,852	38,262,786	90%
SLB commission (Borrow)	1,886,228	2,829,342			471,557		5,187,126	
SLB commission (Lend)	1,320,359	1,508,982			188,623		3,017,964	10%
TOTAL REVENUE	6,629,017	66,797,665	5,133,644	427,804	1,087,983	5,133,644	85,209,757	100%

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